

4.0 ENVIRONMENTAL ANALYSIS

INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

Section 4 examines the potential environmental impacts of the proposed Project and Project Alternatives. This section includes analyses of the environmental issue areas listed below:

- 4.1 Geological Resources;
- 4.2 Hazards and Hazardous Materials;
- 4.3 Air Quality;
- 4.4 Hydrology, Water Resources, and Water Quality;
- 4.5 Biological Resources;
- 4.6 Cultural, Historical, and Paleontological Resources;
- 4.7 Land Use, Planning, and Recreation;
- 4.8 Public Services;
- 4.9 Transportation and Circulation;
- 4.10 Noise;
- 4.11 Aesthetics/Visual Resources;
- 4.12 Energy and Mineral Resources;
- 4.13 Agricultural Resources; and
- 4.14 Environmental Justice.

Each environmental issue area analyzed in this document provides background information and describes the environmental setting (baseline conditions) to help the reader understand the conditions against which an impact would be evaluated. In addition, each section describes how an impact is determined to be “significant” or “less than significant.” Finally, the individual sections recommend mitigation measures (MMs) to reduce significant impacts. Throughout Section 4, Environmental Analysis, both impacts and the corresponding MMs are identified by a bold letter-number designation, e.g., **Impact BIO-1** and **MM BIO-1a**.

Based on an initial review and analysis, it is likely that the proposed Project would have a less than significant impact, or no impact, on the environmental issue area identified below. The primary reasons for these determinations are as follows:

- Population and Housing. The Project would not require a change in the number of employees nor result in the construction or modification of new or existing facilities. The Project would not induce substantial population growth in the area nor displace substantial numbers of people or housing units.

ASSESSMENT METHODOLOGY

Environmental Baseline

The analysis of each issue area begins with an examination of the existing physical setting (baseline conditions as determined pursuant to Section 15125(a) of the State California Environmental Quality Act (CEQA) Guidelines that may be affected by the proposed Project. The effects of the proposed Project are defined as changes to the environmental setting that are attributable to Project components or operation.

Significance Criteria

Significance criteria are identified for each environmental issue area. The significance criteria serve as benchmarks for determining if a component action will result in a significant adverse environmental impact, when evaluated against the baseline. According to Section 15382 of the State CEQA Guidelines, a significant effect on the environment means "... a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the Project ..."

Impact Analysis

Impacts are classified as:

- **Class I** (significant adverse impact that remains significant after mitigation);
- **Class II** (significant adverse impact that can be eliminated or reduced below an issue's significance criteria);
- **Class III** (adverse impact that does not meet or exceed an issue's significance criteria); or
- **Class IV** (beneficial impact).

A determination will be made, based on the analysis of any impact within each affected environmental issue area and the compliance with any recommended mitigation

measure(s), of the level of impact remaining in comparison to the pertinent significance criteria. If the impact remains significant, at or above the significance criteria, it is deemed to be Class I. If a "significant adverse impact" is reduced, based on compliance with mitigation, to a level below the pertinent significance criteria, it is determined to no longer have a significant effect on the environment, i.e., to be "less than significant" (Class II). If an action creates an adverse impact above the baseline condition, but such impact does not meet or exceed the pertinent significance criteria, it is determined to be adverse, but less than significant (Class III). An action that provides an improvement to an environmental issue area in comparison to the baseline information is recognized as a beneficial impact (Class IV).

Formulation of Mitigation Measures and Mitigation Monitoring Program

When significant impacts are identified, feasible mitigation measures are formulated to eliminate or reduce the intensity of the impacts and focus on the protection of sensitive resources. The effectiveness of a mitigation measure is subsequently determined by evaluating the impact remaining after its application. As stated above, those impacts meeting or exceeding the impact significance criteria after mitigation are considered residual impacts that remain significant (Class I). Implementation of more than one mitigation measure may be needed to reduce an impact below a level of significance. The mitigation measures recommended in this document are identified in the impact sections and presented in a Mitigation Monitoring Program (MMP). The MMP is provided in Section 6.0.

If any mitigation measures become incorporated as part of a project's design, they are no longer considered mitigation measures under the CEQA. If they eliminate or reduce a potentially significant impact to a level below the significance criteria, they eliminate the potential for that significant impact, since the "measure" is now a component of the action. Such measures incorporated into the project design have the same status as any "applicant proposed measures." The California State Lands Commission's (CSLC) practice is to include all measures to eliminate or reduce the environmental impacts of a proposed project, whether applicant proposed or recommended mitigation, in the MMP.

Impacts of Alternatives

Section 3.0, Alternatives, provides a list, description, and a map that identify alternatives to the proposed Project. Each issue area in Section 4.0, Environmental Analysis, presents the impact analysis for each alternative scenario. A summary of the collective

1 impacts of each alternative in comparison with the impacts of the proposed Project is
2 included within Section 3.0, Alternatives, and the Executive Summary section.

3 **Cumulative Projects Impact Analysis**

4 Each issue area in Section 4.0, Environmental Analysis, presents the cumulative impact
5 scenario, the focus of which is to identify the potential impacts of the Project that might
6 not be significant when considered alone, but which might contribute to a significant
7 impact when viewed in conjunction with the other projects.

8 **CUMULATIVE RELATED FUTURE PROJECTS**

9 Section 15130 of the State CEQA Guidelines requires that an Environmental Impact
10 Report (EIR) discuss cumulative impacts of a project when the project's incremental
11 effect is cumulatively considerable, as defined in section 15065(c). Where a lead
12 agency is examining a project with an incremental effect that is not "cumulatively
13 considerable," a lead agency need not consider that effect significant, but shall briefly
14 describe its basis for concluding that the incremental effect is not cumulatively
15 considerable. As defined in Section 15355 of the State CEQA Guidelines, a cumulative
16 impact consists of an impact, which is created as a result of the combination of the
17 project evaluated in the EIR, together with other projects causing related impacts. An
18 EIR should not discuss impacts, which do not result in part from the project evaluated in
19 the EIR.

20 The geographic scope of the cumulative impact analysis varies depending upon the
21 specific environmental issue area being analyzed. For the purposes of this EIR, a list of
22 past, present, and future relevant projects has been used to evaluate cumulative
23 impacts (see Tables 4-1, 4-2, and 4-3). These projects are located both onshore and
24 offshore in the Project area. The Project area includes the area surrounding the Project
25 facilities (the Project Facilities), i.e., Platform Holly, Ellwood Onshore Facility (EOF),
26 Ellwood Marine Terminal (EMT), and the associated pipelines, described in detail in
27 Section 2.0, Project Description.

28 The cumulative Project list includes projects that are either reasonably foreseeable. or
29 are expected to be constructed or operated during the life of the proposed Project. This
30 list was compiled from cumulative projects lists available from the CSLC, city of Goleta,
31 and Santa Barbara county, and from consultation with appropriate agencies.

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Table 4-1
Relevant Energy/Industrial/Marine Cumulative Projects

Project Name	Applicant	Description	Status
1. Clearwater Port LNG Terminal at Platform Grace	NorthernStar Natural Gas, Inc.	Offshore LNG Terminal	Pending
2. Carpinteria Field Redevelopment Project	Carone Petroleum Corporation and Pacific Operators Offshore Inc.	Redevelop State leases PRC-4000, PRC-7911, and PRC 3133	Pending
3. Paredon Project	Venoco	Development of off- and onshore oil and gas reserves	Proposed Final EIR has been released for public review.
4. Pitas Point Consolidation of Gas Odorant Stations	Venoco	Consolidation of two NG odorant stations	Pending
5. Ellwood Marine Terminal lease Renewal	Venoco	Extension of lease on the marine terminal/	Pending, EIR undergone public review
6. Temporary trucking of oil from EOF	Venoco	Trucking of oil from EOF if Barge <i>Jovalan</i> becomes unavailable temporarily	Pending
7. Return to production of State lease PRC-421	Venoco	Continuation of offshore oil and gas reserves	Draft EIR has been released for public comment.
8. Platform Grace Mariculture	Hubbs-SeaWorld Research Institute	Installation and operation of marine agriculture pilot plant	Pending
9. Platform Grace	Venoco	Resume oil production	Implemented
10. Dos Pueblos Pipeline abandonment	ARCO	Abandon and remove oil pipeline/pending	Pending
11. Exploration Well Abandonment	Samedan	Exploration Well Abandonment using Mobile Offshore Drilling Unit	Schedule uncertain
12. Development of 36 currently non-producing Federal leases	Various Applicants	Various plans to develop Federal leases	Schedule uncertain due to litigation
12a. Gato Canyon Unit	Samedan	Offshore oil and gas development/	Schedule uncertain
12b. Cavern Point Unit	Venoco	Offshore oil and gas development	Schedule uncertain
13. Oceanway LNG	Los Angeles County	LNG Terminal	EIS/EIR in preparation.

2 Notes: LNG = liquefied natural gas; UCSB = University of California, Santa Barbara; NG = natural gas;
3 ft² = square feet; m² = square meters.

4 Sources: California State Lands Commission 2007, Paredon Project DEIR 2007, Ellwood Marine Terminal Lease
5 Renewal FEIR 2007.

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Table 4-2
Relevant Residential/Commercial/Institutional/Recreational Cumulative Projects

Project Name and Location	Description	Status
1. Bacara Resort & Spa Expansion	168,535 ft ² , 62 two- and three-bedroom units	Pending
2. Sandpiper Golf Course Renovations 7925 Hollister Ave.	Renovation and redevelopment of existing golf course: reconfiguration of layout, demolish existing 8,924 ft ² (829 m ²) clubhouse, build new 27,651 ft ² (2,569 m ²) clubhouse, and lot split	Pending (inactive but application not withdrawn)
3. Rancho Mobile Home Park Subdivision (Guggenheim) 7465 Hollister Ave.	Subdivision of a 17.84 acre rental mobile home park property (150 existing mobile homes)	Pending
4. Citrus Village 7388 Calle Real	11 units	Pending
5. Cabrillo Business Park 6767 Hollister Ave.	Business Park with new structures totaling 714,600 ft ² (R&D, self storage, onsite service related uses)	Pending
6. Comstock Homes Development 7800 block of Hollister Ave./Comstock Homes and Development Partners	62-unit single family development	Under construction
7. Village at Los Carneros S. Los Carneros Rd. Cortona/Castilian Dr.	275 units	Approved
8. Nuevo Edificio 747 S. Kellogg Avenue	3,635 ft ² industrial building	Under construction
9. Campus Pointe, S. Los Carneros Rd., Cortona/ Castilian Dr.	204,000 ft ²	Approved, on hold during processing of Village at Los Carneros Project (see No. 7 above)
10. Ellwood-Devereux Coast Open Space and Habitat Management Plan UCSB	Implementation of Open Space Plan actions, including trail connections, habitat restoration, parking, restroom upgrade, etc.	Pending
11. Ellwood Mesa Open Space Plan city of Goleta	238 acre (96 hectare) habitat protection and recreation, including trail connections, habitat restoration, parking, etc.	Pending
12. Ellwood-Devereux	Implementation of Open Space Plan	Pending

Table 4-2
Relevant Residential/Commercial/Institutional/Recreational Cumulative Projects

Project Name and Location	Description	Status
Coast Open Space and Habitat Management Plan Santa Barbara County	actions, including trail connections, habitat restoration, etc.	
13. Rincon Palms Hotel 6800 Block Cortona Dr.	59,600 ft ² , 112 room hotel	Pending
14. Ocean Meadows Residences	56 units of single-family homes and condominiums	Pending
15. Devereux School Master Plan 701 Storke Rd.	33 acres (13 hectares) and 20 multi-family residential units	Approved
16. Camino Real Marketplace – Skating Facilities Santa Felicia Dr.	46,000 ft ² ice rink, 85 x 200 roller rink	Approved
17. Costco Gas Station 7095 Marketplace Dr.	10,800 ft ² 4-island gas station	Pending
18. UCSB Sierra Madre Student Housing UCSB	(a) 151 units of family student housing on the UCSB North Campus, Storke-Whittier Parcel (b) 172 units of faculty housing	(a) Approved (b) Anticipated
19. UCSB North Parcel Faculty Housing UCSB	236 units of faculty housing on the UCSB North Campus, North Parcel	Approved
20. Islamic Society of Santa Barbara, North-east corner of Los Carneros and Calle Real	7,185 ft ² building for Islamic Center and attached apartment	Pending
21. Los Carneros Pointe Los Carneros Road/ Los Carneros Way	31,051 ft ² commercial development including a day-care facility, restaurant, shops, and office	Pending
22. Page Hotel West side of Kellogg at Ekwill alignment	178,000 ft ² hotel (247 rooms), 11,000 ft ² spa, 6,000 ft ² restaurant	Pending
23. Technology Drive Industrial, west side of Technology Dr.	Eight lots; 68,000 ft ² among 8 commercial/industrial buildings and 92,070 ft ² outside storage area or 265,695 ft ² outside storage area	Pending
24. University Properties South-east corner of Technology and	Four parcels and 5,427 ft ² industrial building (and potential for approx. 15,000 ft ² additional development)	Pending

Table 4-2
Relevant Residential/Commercial/Institutional/Recreational Cumulative Projects

Project Name and Location	Description	Status
Thornwood Dr.		
25. Stokes Industrial Building East side of Technology Dr.	5,000 ft ² industrial building	Pending
26. Fairview Commercial Center 151 S. Fairview Ave.	16,885 ft ² mixed use building – retail and office space	Pending
27. Fairview Gardens 598 N. Fairview Ave.	Two trailers and three yurts (portable wood lattice framed dwelling structures) for farm-worker housing, 1 trailer for kitchen facilities, one 127 ft ² yurt for a farm office	Pending
28. Good Shepherd Lutheran Church, 380 N. Fairview Ave.	Addition of 18,000 ft ² parish hall	Pending
29. City of Goleta Western Snowy Plover Habitat Management Plan	Western Snowy Plover Habitat Management Plan	
30. Sumida Gardens, 5501 Overpass Rd.	200 units	Approved
31. Robinson LLA-related lots Baker, Violet and Daffodil Lanes	13 units	Six approved; seven under construction
32. Old Town Inn and Village, 5665 Hollister Ave.	53,892 ft ² 98-room hotel, 998 ft ² retail/commercial space, 59,226 ft ² for 37 units and garages	Under construction
33. Fairview Corporate Center, 420 S. Fairview Ave.	73,203 ft ² building	Under construction
34. Sturgeon Building SE corner of Los Carneros and Calle Real	14,000 ft ² retail/medical office	Pending
35. Marriott Residence Inn 6300 Hollister Ave.	98,000 ft ² , 140-room hotel	Pending
36. Haskell's Landing Hollister Avenue w/o Las Armas Road	102 residential units	Pending
37. Renco Encoders 26 Coromar Drive	Add 8,800 ft ² manufacturing space and 10,400 ft ² of office space to an existing,	Pending

Table 4-2
Relevant Residential/Commercial/Institutional/Recreational Cumulative Projects

Project Name and Location	Description	Status
	33,600 ft ² M-RP building	
38. Goleta Valley Cottage Hospital/Medical Office Building Reconstruction 351 S. Patterson 5333 Hollister Avenue SE corner of Patterson/Hollister	Hospital: 93,090 ft ² existing, 152,658 ft ² proposed, 59,568 ft ² net new. Medical Office Building: 41, 224 ft ² existing, 55,668 ft ² proposed, 14,444 ft ² new	Pending
39. Live Oak Unitarian Church Phase II 820 N. Fairview Avenue	2,996 ft ² sanctuary and a 316 ft ² restroom facility	Under Construction
40 Mariposa at Ellwood Shores	70,150 ft ² assisted living facility, 7760 Hollister Ave	Pending
41 Goleta West Sanitation District	Trunk line project at Devereux Creek and Phelps Road	Pending
42 Schwan Self Storage	111,730 ft ² self storage facility, 10 S Kellogg	Pending
43 Shelby Trust	75 SFD, 7400 Cathedral Oaks Road	Pending
44 The Corner Shoppes	15,300 ft ² retail/financial institution, 7000 Hollister Ave.	Pending

Notes: ft² = square feet.

Sources: City of Goleta 2007; Santa Barbara County 2007; University of California, Santa Barbara (UCSB) 2004

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Table 4-3
Relevant Residential Cumulative Projects in the Vicinity of the New Pipeline

Project Name and Location	Description	Status
1. Eagle Canyon Ranch (Parsons) North and south of Hwy 101, immediately west of Naples townsite, west of Bacara Resort	1,060 acres, 4 units	Pending
2. Santa Barbara Ranch Project two miles west of the City of Goleta	Amendments to County's Comprehensive Plan, Coastal Land Use Plan and Zoning Ordinance, a variety of subdivision and entitlement applications. Two alternatives are proposed: 54-unit planned development on the 485-acre Santa Barbara Ranch and 72-unit planned development on Santa Barbara Ranch plus the adjacent 2,769-acre Dos Pueblos Ranch. Both alternatives include: an equestrian center, agricultural support facilities, an employee duplex, access road, parking and restroom, hiking, biking, equestrian trails near the coastal bluff, an educational kiosk and a coastal access stair structure, and creation of conservation easements permanently protecting agricultural uses and open space.	Pending
3. Las Varas/ Edwards Ranch (Doheny) North and south of Hwy 01, immediately west of Naples Townsite	1,800 acres, 7 lots/units	Pending
4. Tecolote Canyon North of Hwy 101, West of Goleta	1,047 acres, 26 residential units	Pending
5. Dos Pueblos Ranch Estates Lot 1, South of Hwy 101, 0.5 miles west from Bacara Resort	65 acres, 6,505 ft ² dwelling, 861 ft ² guest house	Pending
6. Dos Pueblos Ranch Estates Lot 2, South of Hwy 101, 0.5 miles west from Bacara Resort	78 acres, 9,436 ft ² dwelling, 928 ft ² guest house	Pending
7. Morehart Land Company Naples Townsite south of Hwy 101	8 residential units, 14 acres	Pending
8. El Capitan Campground Expansion	100 new campsites, comfort station, kiosk, bathhouse, swimming pool, spa, and associated support facilities	Approved
9. Dos Pueblos Naples Residential Development/Naples South of Hwy 101, west of Tomate Canyon	63 acres, 10 residential units	Pending

Notes: ft² = square feet.

Sources: City of Goleta 2007; Santa Barbara County 2007.

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Industrial and Marine Projects

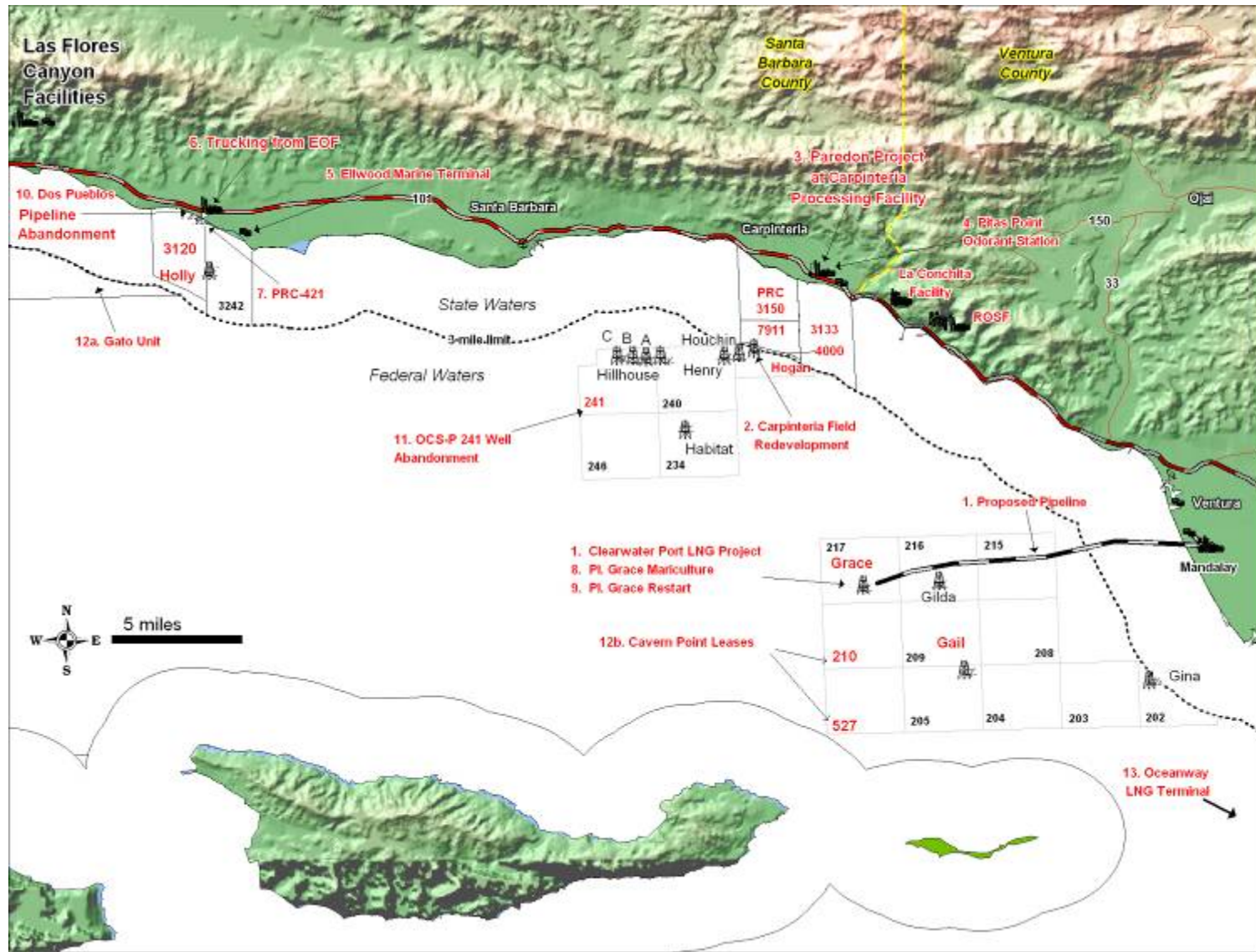
There are several industrial/marine projects proposed in the vicinity of the EOF that may contribute to various cumulative impacts. The projects that are in close proximity to the EOF and Platform Holly or that could have impacts on the same resources as the proposed Project are listed in Table 4-1. Figure 4-1 shows the location of the energy, industrial and marine cumulative projects. Brief descriptions of these projects are given below. All projects are summarized in Table 4-1; the projects in the figures are numbered as in the tables.

1. Clearwater Port LNG Terminal, NorthernStar Natural Gas, Inc.

The Clearwater Port LNG project proposes to retrofit Platform Grace, an existing fixed offshore oil and gas facility operated by Venoco, Inc., located in Federal waters 12.6 miles (20.3 km) offshore of Ventura county, to receive and re-gasify liquefied natural gas (LNG) for transport to shore. Platform Grace will undergo a series of changes as part of its retrofit into a deepwater port facility. This will be accomplished through installation of platform-based re-gasification equipment, LNG floating dock carrier berthing system, LNG sub-sea transfer system, and construction of a new 36-inch (0.9 m) diameter sub-sea pipeline for transport of natural gas to shore at the Reliant Mandalay Power Generation Station in Oxnard. Pipeline construction will include the installation of a sub-sea pipeline segment approximately 13.4 miles (21.6 km) in length, and will tie into the existing Southern California Gas Company (SCGC) pipeline infrastructure in an area of existing industrial development. It will be limited to a pipeline metering station, odorant injection facility, and if necessary, a nitrogen injection facility. Several local transmission terrestrial tie-in segments required for the Project will be constructed by SCGC to upgrade the current infrastructure, which will include the receiving station, Mandalay to Center Road pipeline, Line 324 Loop, Line 225 Loop, Line 3008 extension, and all related station improvements.

Prior to the start of LNG related operations on Platform Grace, all oil and gas production from the platform will be permanently abandoned and decommissioned; however, Platform Grace will continue to serve as a pipeline pigging station for the pipelines coming from Platform Gail to Platform Grace, and from Platform Grace to the onshore Venoco processing plant at Carpinteria. The average anticipated LNG terminal throughput capacity would be at a rate of 1.2 billion standard cubic feet per day (BSCFD), with a peak send out rate of 1.4 BSCFD.

**Figure 4-1
Cumulative Energy, Industrial and Marine Projects**



Crystal Energy, Inc. filed a Deepwater Port License Application with the United States Coast Guard (USCG) on January 28, 2004, and a Submerged Land lease Application to the CSLC on February 10, 2004. On July 3, 2006, Clearwater Port, LLC submitted a restated and amended application to the USCG and the CSLC because the project proponent and project description had changed. The proposed Clearwater Port terminal is projected to be operational by 2010 pending environmental review and approvals by various State and Federal agencies.

2. Carpinteria Field Redevelopment Project, Carone Petroleum Corporation and Pacific Operators Offshore Inc.

Carone has applied to the CSLC to develop and produce existing State oil and gas leases PRC 4000, PRC 7911, and PRC 3133 within the Carpinteria Field. Specifically, Carone proposed to drill up to 25 new production or injection wells from Outer Continental Shelf (OCS) Platform Hogan (located in lease OSC-P 0166). Oil and gas production from the State leases would be commingled on Platform Hogan with existing production from the Federal lease and sent via existing pipelines to the La Conchita Facility. After processing, gas and oil would be sold to The Gas Company and other third parties at the La Conchita sales meters, and shipped via existing pipelines. Total production would increase from approximately 1,300 to 1,500 barrels per day (BPD) of crude to approximately 6,000 BPD of crude through January 2020, at which time total production would decline. The project is currently under review.

3. Paredon Project PRC-3150, Venoco

Venoco has applied to the CSLC (application received in February 2005) and to the city of Carpinteria to develop existing State oil and gas lease PRC 3150.1 by conducting extended-reach drilling from an onshore site located within Venoco's existing Carpinteria Oil and Gas Processing Facility (Carpinteria Processing Facility), in the city of Carpinteria. Venoco estimates that this Project could produce up to 10,000 barrels per day (BPD) (1,590 m³/day) of crude oil, and 10 MMSCFD (283,169 m³/day) of gas. After processing, oil would enter an existing 16-inch diameter (0.4 m) pipeline extending to the Rincon Onshore Separation Facility (ROSF), for connection with the existing pipeline system extending to Los Angeles refineries. Processed gas would be delivered via the existing six-inch diameter (0.15 m) pipeline connection to Southern California Gas Company's existing regional 12-inch diameter (0.7 m) pipeline that passes near the Carpinteria Processing Facility. The application was found complete in October 2005

1 and the Project is currently undergoing the environmental review process. The city of
2 Carpinteria published a Final EIR in March 2008.

3 **4. Pitas Point Consolidation of Gas Odorant Stations, Venoco**

4 Venoco applied to the city of Carpinteria Planning Commission for the relocation of an
5 existing Natural Gas Odorant and Custody Transfer Station (Carpinteria station) from
6 within the Carpinteria Processing Facility property to the existing Pitas Point Facility,
7 located 200 feet (61 m) west of the southwest corner of the Carpinteria Processing
8 Facility property. The proposal includes dismantling the Carpinteria station; re-routing
9 the gas pipeline to the Pitas Point facility; constructing approximately 1,800 linear feet
10 (550 m) of new pipeline, located both above and below ground; constructing a new
11 1,000 gallon (4 m³) odorant tank, which would replace an existing 1,200-gallon (4.5 m³)
12 odorant tank; constructing a new eight foot tall (2.4 m) fence around the facility; and
13 constructing a new Venoco meter in addition to the existing meter. The EIR for the
14 project was certified in August 2004.

15 **5. Ellwood Marine Terminal Lease Renewal, Venoco**

16 Venoco is currently seeking approval from the CSLC for renewal of existing State lease
17 (PRC-3904.1) through February 28, 2013. This would allow Venoco to continue
18 operating the existing EMT, located offshore the city of Goleta, and lands under the
19 ownership of UCSB (CSLC 2006b). The proposed Project does not include the
20 construction of any new facilities or modifications to existing facilities; however, it does
21 include the potential for increasing the crude oil throughput and transportation from
22 current levels to permitted levels (CSLC 2006b). A Final EIR has been completed. A
23 decision on this project is awaiting a hearing by the CSLC Commissioners.

24 **6. Temporary Trucking of Oil from EOF, Venoco**

25 Venoco has submitted an application to the city of Goleta to allow for back-up trucking
26 of crude oil in case the Barge *Jovalan* is temporarily out of service (i.e., for repairs).
27 This project would entail modifications to the EOF to add a new truck loading rack to
28 accommodate loading of crude oil. Venoco does not currently intend to utilize the
29 permit (if issued) to truck the oil, but wants the permit in place so they can be ready to
30 temporarily truck crude-oil as a back-up if the Barge *Jovalan* is out of service. Long-
31 term trucking of either lease PRC 421 or Platform Holly crude oil would require
32 additional permitting and approval by the city of Goleta. The temporary trucking

1 application to the city of Goleta specifies a single event per year not to exceed 90 days.
2 Long-term trucking would require additional CEQA review and permitting; and may be
3 inconsistent with city policies thereby requiring a General Plan amendment and
4 subsequent vote of the people. Should Venoco utilize a trucking option after cessation
5 of marine transport in 2013, it is estimated that approximately two tanker trucks per day
6 would be required to transport the PRC 421 production and 36 per day to transport the
7 Holly production in the early years of truck transport. Currently, the application has
8 been deemed unapprovable by the city of Goleta under the LED and the city of Goleta
9 is recommending withdrawal or the application will be denied.

10 **7. Return to Production of State Lease 421, Venoco**

11 Venoco is proposing to return State lease PRC 421 to production. The plan for this
12 project was received in May 2004, and it has been reviewed by the Santa Barbara
13 County Energy Division, in consultation with the city of Goleta, as well as by the CSLC.
14 The project includes the installation of equipment on oil Piers 421-1 and 421-2; repairs
15 to the access road, rock rip-rap wall, and caisson at the end of Pier 421-1; installation of
16 a drilling rig and new oil separation and processing equipment on Pier 421-2; and
17 reactivation of the oil well on Pier 421-2 with a capacity to produce up to 700 BPD
18 (111 m³/day). The oil would be pumped to Line 96 through an existing pipeline and
19 then to the EMT. The existing pipeline between Line 96 and Pier 421-1 would be
20 upgraded. The CSLC, Santa Barbara county, and the city of Goleta provided comments
21 on the proposed plan, including local permitting and policy concerns. The public
22 scoping meeting for this Project was held on June 23, 2005, and the public Draft EIR
23 was released on September 4, 2007. The Final EIR has not been released as of this
24 writing.

25 **8. Platform Grace Mariculture Project, Hubbs-SeaWorld Research Institute**

26 Development of the Grace Mariculture Project would not require any substantial new
27 equipment on the platform or modification of the existing platform structure. As
28 proposed, the project would include four submerged cages around the platform as well
29 as tanks on the main platform deck for hatchery and nursery operations. The project
30 would utilize the existing platform infrastructure and energy resources at well-below-
31 historical levels and well within the design parameters of the structure. The pilot scale
32 phase of the project is expected to last three years, at the end of which, the project
33 would be reassessed. This project will either be finished or could potentially co-exist

1 with the Clearwater Port LNG Terminal on Platform Grace (described in No. 2, above),
2 by the time the LNG Terminal project is considered.

3 **9. Return to Production of Platform Grace, Venoco**

4 Venoco has resumed oil production at Platform Grace (approximately 29 miles [46.7
5 km] southeast of the EMT). It is doubtful that returning Platform Grace to production
6 would co-exist with the implementation of the Clearwater Port LNG Project (No. 2).

7 **10. Dos Pueblos Pipeline Abandonment, ARCO**

8 ARCO seeks the necessary permits from the county and the city to remove several
9 abandoned pipelines and ancillary equipment associated with its former Dos Pueblos oil
10 and gas production operation. These pipelines originate on the former Dos Pueblos site
11 and traverse in an easterly direction across the privately owned Eagle Canyon Ranch
12 within a former right-of-way easement leased by ARCO. The pipelines terminate on the
13 Eagle Canyon Ranch property, with one exception. Segments of a former crude oil
14 transport pipeline can be found eastward across the city limit boundary, through the
15 Bacara Resort and Spa property, and Bell Creek, where the pipeline terminates
16 adjacent to the EOF. Most of this pipeline was removed from the Bacara property at the
17 time of resort construction. One segment remains that crosses Tecolote Creek and the
18 adjacent slopes. Depending on water flow in the creek and under story growth,
19 approximately 20 feet (6.1 m) of pipe is intermittently exposed in Tecolote Creek. East
20 of Bacara, the pipeline traverses the steep western slope of Bell Creek and is then
21 suspended over Bell Creek. To the east of Bell Creek, the pipeline is buried below
22 ground, adjacent to a dirt road paralleling the Venoco EOF fence line.

23 ARCO proposes to remove all above-ground portions of the abandoned pipelines.
24 Buried segments of the pipeline bundle for which ARCO has responsibility will also be
25 removed from the Eagle Canyon Ranch. The buried pipeline beneath the access road
26 immediately west of the Venoco EOF will be filled with grout and abandoned in-place.
27 ARCO will provide a recommendation regarding the removal of a second (possibly
28 1950s vintage or earlier) abandoned pipeline of unknown origin suspended over Bell
29 Creek and its concrete pipe supports upon completion of an ongoing evaluation of the
30 physical extent of the pipeline, the operational history of the line, and possible former
31 operators.

The ARCO application for a Demolition and Reclamation Permit has been found complete. An Initial Study is currently underway as the first step in the environmental review process. The permit application for the portion of the abandoned pipelines in the city of Goleta's jurisdiction has yet to be found complete, pending landowner authorization from the Bacara Resort.

11. Exploration Well Abandonment, Samedan Oil Company

Well OCS-P 0241 #2 was drilled and temporarily abandoned in 1968. The operator proposes to permanently abandon the well using a Mobile Offshore Drilling Unit (MODU). The sequence of activities would be as follows: (1) the MODU would anchor over the well; (2) the well would be entered and temporary plugs removed; (3) permanent cement plugs would be placed; (4) the wellhead and casing would be removed; and, (5) anchors would be removed and the MODU moved offsite. Samedan estimates that 11 days would be needed to conduct abandonment activities.

12. Offshore Oil and Gas Leasing

Currently, there are 79 OCS oil and gas leases offshore of Southern California, which include 43 producing leases. Production from these leases is expected to continue for the next five to 20 years. The Minerals Management Service (MMS) currently has no proposals for decommissioning offshore facilities.

There are also 36 non-producing Federal leases. The potential Federal lease development projects that are in close proximity to Ellwood Southfield are described in brief below. However, the future of the undeveloped leases is in question, as a result of litigation and continuing objections from the State of California. The disposition of the undeveloped leases may now be established as a result of a decision in the *Amber Resources et al. vs. United States* case, (currently in the U.S. Court of Federal Claims), which held that the United States breached its contract with the owners of the leases and must repay original bonus bid amounts, roughly \$1.1 billion. The judge in *Amber* deferred final judgment pending resolution of all claims; therefore, the case remains in litigation. For the purposes of the cumulative analysis, it has been assumed that the development of these OCS leases would occur as projected by the lease operators and summarized by the MMS in 2005 and 2006 (MMS, 2005; MMS, 2006). Further delays in the development of these cumulative offshore oil and gas development projects would only serve to reduce or eliminate the overlap with the proposed Project.

12a. Gato Canyon Unit, Samedan Oil Company

Samedan is the current operator of the Gato Canyon Unit. The Gato Canyon Unit includes Leases OCS-P 0460 and 0464. The Gato Canyon Unit would be developed from a new platform in lease OCS-P 0460, offshore the El Capitan area of the Gaviota Coast. In total, the new platform could potentially include 28 well slots, 20 production wells and four service wells. A new 14-inch (0.36 m) wet oil pipeline, eight-inch (0.2 m) gas pipeline, eight-inch (0.2 m) produced water pipeline, and two power cables would connect the platform to the existing ExxonMobil LFC facility (MMS 2005). The pipelines and cable would run from the platform, traversing State lease PRC 2991.1 to landfall, and then through the existing Santa Ynez Unit pipeline corridor to the LFC facility. Gas would be processed at the LFC Gas Plant and sold to The Gas Company (MMS 2005). Oil would be processed at the LFC facility, using existing capacity, and then transported to other locations outside of Santa Barbara county via the All-American Pipeline (AAPL). Produced water is currently proposed to be treated at the existing LFC Water Treatment Plant, transported offshore by pipeline, and disposed of at the new platform.

12b. Cavern Point Unit, Venoco

Venoco is the current operator of the Cavern Point Unit. The Unit includes leases OCS-P 0210 and 0527, located off the coast of Ventura county. Potential development of the Cavern Point Unit would occur from existing Platform Gail. Development could include extended reach drilling of eleven wells from Platform Gail, including ten oil wells and one service well (MMS 2005). Produced oil and gas would be transported via Platform Gail's existing off- to onshore pipelines to Venoco's existing Carpinteria Oil and Gas Processing Facility, located in the city of Carpinteria.

13. Oceanway LNG

The Ocean Way LNG Terminal project would be located in the Pacific Ocean about 22 miles south of Los Angeles, California. The project would be a ship mooring facility. The LNG would be re-gasified while still on board the ship, transported through flexible connection to an underwater natural gas pipeline that would come onshore at the Los Angeles International Airport, and connect to the Gas Company delivery network. The proposed site is to be located 20 miles off the coast of California at Los Angeles. The project would utilize ambient air vaporizers.

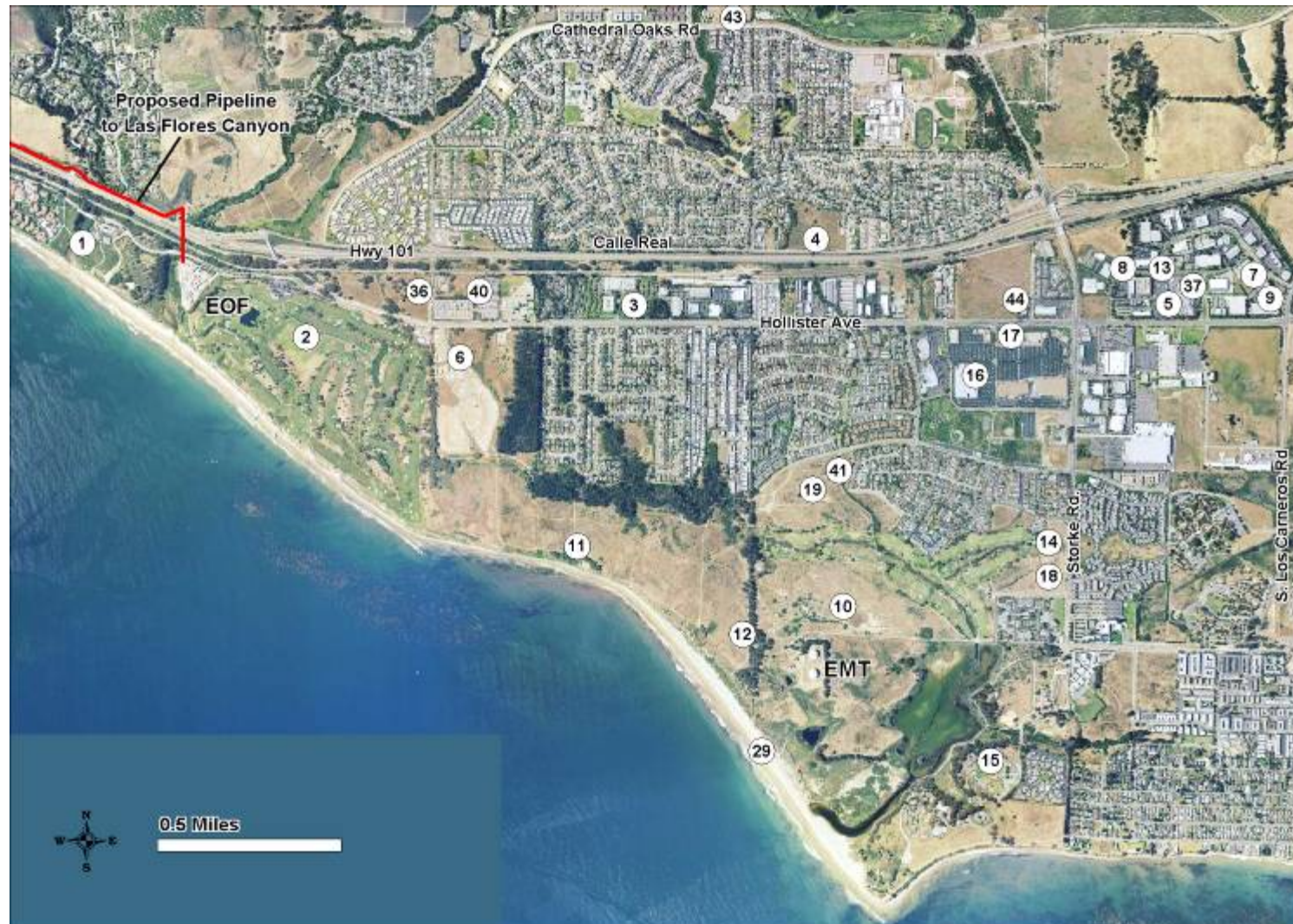
Residential, Commercial, Institutional, and Recreational Projects

In addition to the industrial and marine projects, there are various residential, institutional, recreational, or commercial projects that could contribute to a cumulative impact in the area surrounding the proposed Project and Alternatives. These projects are under the jurisdiction of the city of Goleta, Santa Barbara county, and UCSB and are listed by corresponding number in Table 4-2. Currently there are over 1,400 residential units and close to 2,500,000 square feet (204,390 m²) of commercial or industrial property under review, or approved but not constructed.

Figure 4-2 shows locations of the onshore residential and commercial developments proposed or approved in the vicinity of the EOF and EMT. More distant cumulative projects are not mapped. Smaller size projects – under 3,000 square feet (279 m²), and under three units – are not listed in Table 4-2.

Table 4-3 lists the projects that are located over 0.5 miles (0.8 km) west of the Bacara Resort and along the proposed oil pipeline route between the EOF and LFC. These projects are pending through the county of Santa Barbara.

Figure 4-2
Cumulative Residential, Commercial, Institutional, and Recreational Projects



Notes: See text for identification of the numbers. Numbers not shown are located off of the map.

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4.0 ENVIRONMENTAL ANALYSIS	4-1
INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS	4-1
ASSESSMENT METHODOLOGY	4-2
Environmental Baseline.....	4-2
Significance Criteria	4-2
Impact Analysis	4-2
Formulation of Mitigation Measures and Mitigation Monitoring Program	4-3
Impacts of Alternatives	4-3
Cumulative Projects Impact Analysis	4-4
CUMULATIVE RELATED FUTURE PROJECTS.....	4-4
Industrial and Marine Projects	4-11
Residential, Commercial, Institutional, and Recreational Projects	4-19

LIST OF TABLES

Table 4-1 Relevant Energy/Industrial/Marine Cumulative Projects.....	4-5
Table 4-2 Relevant Residential/Commercial/Institutional/Recreational Cumulative Projects	4-6
Table 4-3 Relevant Residential Cumulative Projects in the Vicinity of the New Pipeline.....	4-10

LIST OF FIGURES

Figure 4-1 Cumulative Energy, Industrial and Marine Projects.....	4-12
Figure 4-2 Cumulative Residential, Commercial, Institutional, and Recreational Projects	4-20